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having an axial interengagement length from one of said opposite open ends that is in engagement with an inside surface of said through hole and that is shorter than an axial length of said through hole, a second portion thinner than and adjacent to said first portion and that is not in engagement with an inside surface of said through hole, and a toothed wheel adjacent to an end of said first portion opposite from said second portion; and

reinforcing means provided at least inside said through hole for securely fixing said shaft in a predetermined position in said magnet.

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23. (Thrice Amended) A method of producing a rotor for an electric motor, comprising the steps of:

forming a coating on at least an inside surface of a through hole of an annular magnet material having a rotation axis, said through hole having opposite open ends and extending coaxially with said rotation axis;

providing a shaft having a stepped outer surface and including a first portion capable of being fitted in said through hole, a second portion thinner than and adjacent to said first portion, and a toothed wheel adjacent to an end of said first portion opposite from said second portion; and

inserting said first and second portions of said shaft into said through hole of said magnet until an axial interengagement length of said first portion from one of said opposite open ends, shorter than an axial length of said through hole, is engaged in a tightly press-fit manner with said coating while the second portion of said shaft is not in engagement with said coating.

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(3) 26. (Twice Amended) A method of producing a rotor for an electric motor, comprising the steps of:

providing a magnet having a rotation axis and a through hole with opposite open ends extending coaxially with said rotation axis;

providing a shaft having a stepped outer surface and including a first portion capable of being fitted in said through hole, a second portion axially adjacent to and thinner than said first portion for defining a clearance inside said through hole, and a toothed wheel adjacent to an end of said first portion opposite from said second portion;

inserting said shaft into said through hole of said magnet and fitting said first portion of said shaft in said through hole, until an axial interengagement length of said first portion from one of the opposite ends of the through hole, shorter than an axial length of said through hole, is obtained; and

filling an adhesive in said clearance inside said through hole.

REMARKS

Claims 1-11, 14, 15, and 17-31 remain in the application. Claims 29-31 are allowed and claims 1-11, 14, 15, and 17-28 stand rejected. Of the rejected claims claims 1, 23, and 26 are independent.

In the Office Action, the Examiner rejected claims 1, 2, 15, 17, 18, 20, 22, 23, 25, and 26 under 35 U.S.C. § 103(a) as being unpatentable over Sakamoto (U.S. Patent No. 6,172,438, in view of Marioni); rejected claims 3, 4, 11, 19, 21, and 28 under 35 U.S.C. § 103(a) as being unpatentable over Sakamoto in view of Marioni and Miyahara et al.; rejected claims 6-10 under 35 U.S.C. § 103(a) as being unpatentable over Sakamoto in view of Marioni and Miyahara et al. and Tagaya; rejected claim 5 under 35

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